

PART 501 AUTHORIZATIONS
SUBPART A – REVIEW AND APPROVAL

§501.04 Engineering job approval authority.

(a) State engineering approval authority (Classes I through V)

- 1) Approval authority in Pennsylvania shall be delegated according to the classes of jobs established in the "Pennsylvania Engineering Job Approval Authority" form PA-ENG-5, Pennsylvania Supplement to §501.09. Authorities granted in connection with Form PA-ENG-5 are applicable when Pennsylvania Technical Guide Standards and related policies are followed.
- 2) Engineering practices normally used in Pennsylvania are listed on Form PA-ENG-5, "Pennsylvania Engineering Job Approval Authority." This chart shall be used to classify all engineering jobs. The classification for any given job will be based on all elements or features of the planned installation. The control factor of greatest dimension or having the most restrictive value, whichever gives the highest job classification, will determine the job classification.
- 3) All jobs not listed or more complex than those listed on PA-ENG-5 require the design approval of the State Conservation Engineer or an NRCS registered P.E. when delegated by the SCE, and may also require the review and concurrence of the Director of the Conservation Engineering Division.
- 4) Special conditions can override an individual's regular job approval authority for designs:
 - a) All jobs that require review or approval by a state regulatory agency must be approved by the State Conservation Engineer or Area Engineer, as appropriate. A job that qualifies for a DEP Chapter 105 General Permit may be approved by an individual who has the appropriate job approval authority. Such General Permit jobs do not require an engineer's approval unless other permits also apply.

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- b) Designs for the repair or substantial modification or addition to an existing practice must be approved by an individual other than the approver of the original design, with job approval authority one class higher than the actual class of the job.
 - c) Designs for all Class IV and above jobs must be approved by an engineer to avoid conflict with private professional engineers and the state engineering registration law.
- 5) All inventories and evaluations (the planning function), designs, and construction checks shall be made or approved by an individual with appropriate approval authority, as indicated on a current approved Form PA-ENG-5. The approving individual shall review the survey, design, drawings, and specifications and satisfy himself/herself that the following requirements are met:
- a) The plans and specifications conform to NRCS standards and policy and meet the requirements of sound engineering practices.
 - b) Engineering assumptions are appropriate for the job.
 - c) Adequate field surveys, soils and geology investigations have been made.
 - d) Mathematical calculations are correct.
 - e) The layout is satisfactory.
 - f) The design has been reviewed by the landuser.
 - g) Installation made in accordance with the plans will function properly, with proper operation and maintenance.
 - h) Engineering designs prepared by individuals in their present position for less than three years (annual review of job approval authority per NEM §501.04(b)(5)) shall be carefully checked by someone other than the person preparing the design, with equal or greater job approval authority.

All design drawings must bear the initials of the designer and checker, and bear the signature of the approving individual. The drawings will show the dates the design and checking were completed and the date of approval.

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- 6) All significant changes to design drawings and specifications, after approval, will be documented by a brief note on the first sheet of the drawing describing the change followed by the signature of the approver and date of approval. Every possible effort shall be made to review proposed changes with the original designer.

All engineering practices shall be installed in accordance with the approved drawings and specifications. Design drawings and specifications shall not be altered without the permission of a person having the proper approval authority, except for minor changes that would not affect the safety or function of the structure. All significant changes in elevation, dimensions, layout or design made during construction shall be shown in red on the drawings, with each change properly authorized and dated.

- 7) The official copy of the individual's job approval authority shall be their original PA-ENG-5 with the signatures of the delegating engineer and concurring supervisor, and subsequent changes initialed and dated by the delegating engineer. The individual shall retain the official copy of the PA-ENG-5.

Copies of the completed PA-ENG-5 shall be distributed to the individual's administrative supervisor and the delegating engineer. The State Conservation Engineer shall receive copies of PA-ENG-5 for all engineers, area engineering technicians, project office engineering technicians and inspectors, and cooperating agency engineers. The District Conservationist shall receive copies of PA-ENG-5 for cooperating agency employees working within the county.

- 8) In determining the capability of an individual to perform work on a particular class of job, experience and proficiency in the following areas will be considered: job investigations, engineering surveys, mathematical calculations, design layouts, detailed plans, and inspection of construction. The availability of a capable reviewer, with design authority for the practice being reviewed, is to be considered in assigning design, approval, and construction authority.
- 9) Planning, surveying, designing, drawing, specification development, and construction inspection may be performed by an employee who does not have approval authority for the kind and size of work involved. However, work performed in these situations will only be done under the direction of an employee having the required approval authority and using the procedure specified. This work will be checked and approved by the employee with the required approval authority.

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- 10) The District Conservationist and the Area Engineer will reach an agreement with the Supervisor of a cooperating agency's employee before delegating job approval authority on Form PA-ENG-5. The cooperating agency may request lower limits than could otherwise be assigned. The District Conservationist should request the supervisor of the cooperating agency's employee to co-approve the Form PA-ENG-5.

The following procedure is to be used by cooperating agencies in requesting NRCS review and evaluation of the engineering capabilities of their employees as they relate to the planning, design and installation of conservation practices. Authorization for non-NRCS employees to receive job approval is found in Part 501.01(b).

- a) Submit the request to the District Conservationist for the Field Office where the employees will be principally working. The request should name the employee and contain a brief outline of the employee's training, knowledge, and experience.
- b) The District Conservationist will forward the request with a recommendation to the Area Engineer. The Area Engineer, with the assistance of the District Conservationist, will evaluate the cooperating agency employee's capabilities. The evaluation will be conducted in accordance with the requirements of this section.
- c) The District Conservationist will inform the cooperating agency of the results of the evaluation by providing copies of Form PA-ENG-5 listing the appropriate levels granted. As part of the process, the cooperating agency will be advised of any recommended training that NRCS believes would be beneficial to the employee to help met the cooperating agency's certification objectives.
- d) NRCS delegation of job approval authority does not imply that liability protection is provided for employees of cooperating agencies doing engineering work.